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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,736	03/22/2007	Toshiyuki Komori	0230-0232PUS1	3727
2292 7590 11/22/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER FOX, DAVID T				
ART UNIT 1638		PAPER NUMBER		
NOTIFICATION DATE 11/22/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/560,736

**Applicant(s)**

KOMORI, TOSHIYUKI

**Examiner**

David T. Fox

**Art Unit**

1638

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Applicant's Response***

Applicant's amendments and accompanying response of 02 September 2010 have obviated all objections and rejections not repeated below.

***Specification Objection***

The Examiner acknowledges Applicant's amendment of page 1 of the specification to introduce the reference to the PCT from which this application originates. However, that amendment was not accompanied by instructions to delete original paragraph [0001] on page 1 of the specification, lines 5-7, which is now redundant.

***Obviousness***

**Claims 1-3 and 7-10** remain rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown et al (US 7,314,971** effectively filed 12 July 2002), as stated on pages 6-8 of the last Office action for claims 1-4 and 7-10.

Applicant's arguments filed 02 September 2010 have been fully considered but they are not persuasive. Applicant urges that Brown et al do not teach a gametophytic restorer gene. The Examiner concurs, but notes that Brown et al suggest transformed plants with two or more copies of a single restorer gene at unlinked loci, wherein choice of type of restorer would have been mere substitution of know equivalents, as stated previously.

**Claims 1-3 and 7-10** remain rejected under 35 U.S.C. 103(a) as being unpatentable over **Hanson et al (US 7,164,058** effectively filed 10 January 2002) in view of **Mariani et al (1992, Nature 357: 384-387)**, further in view of **Schoffl et al**

(1993, Transgenic Research 2: 93-100), as stated on pages 8-10 of the last Office action for claims 1-4 and 7-10.

Applicant's arguments filed 02 September 2010 have been fully considered but they are not persuasive. Applicant urges that Hanson et al teach the linkage of two sporophytic restorer genes within a single locus. Applicant further urges that Hanson et al fail to teach the isolation of gametophytic restorer genes or their successful introduction into plants by transformation, which was deemed unpredictable prior to Applicant's invention. Applicant further urges that Hanson et al fail to teach the temperature stability of seed germination resulting from the gametophytic restorer genes.

The Examiner maintains that Hanson et al suggest the use of two *or more* copies of a restorer gene for transgenic introduction, in column 62, lines 30-31, as stated previously; while the remaining references suggest the use of multiple restorer genes, one of which is placed under the control of an inducible promoter, as stated previously. Choice of type of restorer gene would have been the mere substitution of known equivalents, as stated previously.

Regarding Applicant's allegedly unexpected results, namely the successful function of isolated gametophytic restorer genes at unlinked loci in transgenic plants; the Examiner maintains that these results were dependent upon the re-introduction of a native restorer gene back into the plant species from which it was isolated. However, the claims are not so limited.

Regarding Applicant's allegedly unexpected results regarding the temperature stability of seed germination, the Examiner maintains that these results were dependent upon the use of the rice restorer gene for the BT cytoplasm in rice. However, the claims are not so limited.

See In re Lindner, 173 USPQ 356 (CCPA 1972) and In re Grasselli, 218 USPQ 769 (Fed. Cir. 1983) which teach that the evidence of nonobviousness should be commensurate with the scope of the claims.

### ***Conclusion***

Claims 5-6 are deemed free of the prior art, given the failure of the prior art to teach or reasonably suggest rice transformation with multiple copies of the rice Rf-1 gene restoring fertility to the BT cytoplasm, wherein the multiple copies were at unlinked loci.

Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (571) 272-0795. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg, can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David T Fox/

Primary Examiner, Art Unit 1638

November 16, 2010